

Adolescent Romantic Relationships in the Digital Age

RACHEL E. GOLDBERG and MARTA TIENDA

Abstract

This essay summarizes key substantive findings about adolescent romantic relationships, identifying methodological and measurement innovations that have broadened understanding of their precursors and consequences. Research to date has been limited by narrow definitions of what constitutes a relationship; a focus on specific behaviors (e.g., sexual activity) to the neglect of relational dynamics; and insufficient measurement precision to portray fluctuations in the character of involvement and partnership quality. The final section discusses the implications of mobile technologies for administering intensive longitudinal surveys that are better suited to study the dynamics and consequences of teen romance in the digital age.

INTRODUCTION

Adolescence is a pivotal developmental period, when health, educational, social, and behavioral trajectories set in motion during early childhood are either reified or diverted (Crosnoe & Johnson, 2011). In addition to the myriad physical and neurological changes that occur during the teen years, family roles change, time spent with peers increases, and romantic relationships emerge (Furman & Shaffer, 2003). Despite growing agreement that romantic partnerships are the dominant source of teenagers' positive or negative emotions (Furman, McDunn, & Young, 2008), much early research either minimized their developmental significance as transitory "puppy love" or exaggerated the negative aspects by focusing on adverse outcomes such as depression, delinquent behavior, unprotected sexual intercourse, and pregnancy (Collins, 2003; Harden, 2014).

Recent scholarship links teen partnering behavior with a broad range of *both* salutary and adverse outcomes that include emotional and physical health, identity formation, educational achievement, career aspirations, and union stability in adulthood (Collins, Welsh, & Furman, 2009; Meier &

Allen, 2009). Despite growing consensus that the consequences of adolescent coupling depend on relationship quality and the social context in which it emerges and evolves (Collins, 2003; Crosnoe & Johnson, 2011), relatively few studies explicitly consider how these aspects of teen romance moderate their psychosocial and health consequences (Giordano, 2003).

Here we summarize key substantive findings about adolescent romantic relationships, identifying methodological and measurement innovations that increased understanding of their precursors and consequences. We argue that research to date has been limited by narrow definitions of what constitutes a relationship; a focus on allegedly deviant behaviors (e.g., sexual activity); relative neglect of relational dynamics; and insufficient measurement precision to portray fluctuations in the character of involvement and partnership quality, or to record flux in other dimensions of adolescents' lives associated with teens' coupling behavior. The final section discusses how mobile technologies afford new opportunities to learn about the dynamics and consequences of teen romance in the digital age.

TEEN RELATIONSHIPS: DEFINITIONS

Adolescent romantic relationships allegedly differ from those of mature adults in their emotionality, instability, and asymmetry, which complicates estimates of their prevalence, quality, and developmental significance (Giordano, 2003). What defines a teen romantic relationship also is poorly understood because the initial stages are often ambiguous, initially incubated within peer networks (Cavanagh, 2007). A widely cited chapter by Carver, Joyner, and Udry (2003) estimated that two-thirds of adolescents aged 12–18 experienced a romantic relationship in the prior 18 months, with a median duration of 14 months. That over one-quarter of teens could not remember when their relationship began reveals two challenges in characterizing teen romantic relationships: recall biases and definitional ambiguities. Youth surveys that ask about “special” or reciprocated partnerships seldom capture emergent relationships or movement between states (Collins *et al.*, 2009). Moreover, relationships that appear as enduring or stably dissolved in cross-sectional measurement may be “on/off” in nature (Halpern-Meekin, Manning, Giordano, & Longmore, 2013). This implies that both cross-sectional and longitudinal measurements separated by wide intervals will understate their prevalence. The lack of standard operational definitions of adolescent romantic relationships results in varying estimates of prevalence, duration, and consequences, and also limits researchers' ability to characterize how adolescent partnerships emerge, progress, and end.

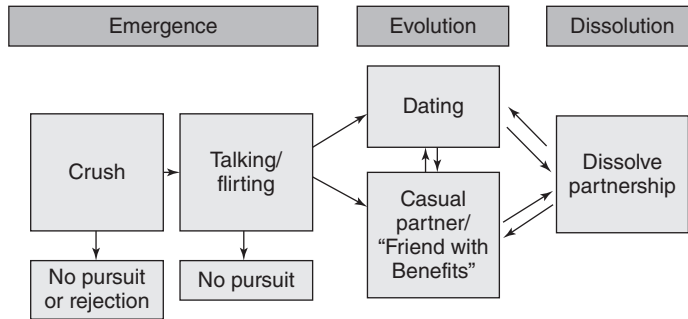


Figure 1 Conceptual schema of adolescent relationships.

Figure 1 presents a stylized scheme of adolescent romantic relationships that distinguishes asymmetrical attractions (crushes); explicitly acknowledges variations in partnership type and seriousness; and allows for bidirectional flux between dating and dissolution states. Importantly, the framework represents an important theoretical distinction between “romantic relationships,” which are reciprocated, and “romantic experiences,” which include hook-ups and unrequited attractions (Collins *et al.*, 2009). Most studies recognize fully formed partnerships, and some also acknowledge “casual” or “non-relationship” sexual activity (Manning, Longmore, & Giordano, 2005), but surveys rarely inquire about emergent (“flirting” or “talking”) or aspirational (crushes) relationships. Described as an extension of the screening process, “talking” is key to emerging emotional attachments (Bergdall *et al.*, 2012), but is seldom measured by studies focused on established partnerships. That crushes are largely ignored has precluded study of links between emergent and aspirational relationships and myriad psychosocial outcomes. For example, unreciprocated feelings are presumed to trigger negative affect, but relatively little is known about their impact on other outcomes, including long-term capacity for establishing emotional bonds (Furman *et al.*, 2008).

In addition to their limitations for characterizing the nature of romantic involvement, youth surveys rarely collect information on the relational dynamics and emotional content of teen partnerships. Temporal information about conflict, abuse, support, emotional intimacy, and power asymmetries is essential to judge the developmental significance of adolescents’ romantic relationships, yet is rarely collected (Collins, 2003). The Toledo Adolescent Relationship Study (TARS) is a notable exception (Giordano, 2003); however, like most periodic longitudinal studies of youth, the long interwave intervals cannot capture temporal fluctuations in relationship quality even within enduring partnerships. As elaborated below, the lack of information on

temporally ordered changes in the partner dynamics and emotional content of teen relationships precludes causal assessments of their developmental and psychosocial significance.

DEVELOPMENTAL SALIENCE OF TEEN ROMANTIC RELATIONSHIPS

Attachment theory, the dominant theoretical perspective guiding studies of adolescent relationships, posits an association between secure emotional bonds experienced early in life and success in forming subsequent relationships (Giordano, 2003). Although reasonable on its face, attachment theories largely eschew variations in subjective meanings of interpersonal ties that depend on relationship context and quality, including the occurrence and timing of events that disrupt primary or secondary emotional bonds (Collins *et al.*, 2009; Elder, 1998). Also contestable are assumptions that emotional bonds are necessarily developmentally prosocial, and a focus on individuals to the neglect of broader social influences (Giordano, 2003).

Crosnoe and Johnson (2011) urge more holistic views of overlapping relationships among family members, peers, and partners. In fact, a growing body of scholarship shows substantial carry-over from aspects of teens' lives outside of the romantic realm, such as their family relationships and friendships, into their romantic experiences (Cavanagh, Crissey, & Raley, 2008; Furman & Shaffer, 2003). Based on extensive evidence that the capacity for intimacy in adulthood evolves from earlier interpersonal experiences that accumulate across childhood and adolescence (Rauer, Pettit, Lansford, Bates, & Dodge, 2013; Roisman, Booth-LaForce, Cauffman, & Spieker, 2008), Crosnoe and Johnson (2011, p. 451) recommend "looking back to childhood and looking forward to adulthood" and critically examining both the quality of relationships and the context within which they occur.

Figure 2 provides a conceptual framework that identifies several childhood and adolescent experiences associated with adolescents' romantic attachments and several of the most commonly evaluated short- and long-term outcomes linked to teen romantic partnerships, including the capacity to form healthy adult unions (Meier & Allen, 2009; Raley, Crissey, & Muller, 2007). We use this framework to characterize insights about the contours and quality of teen partnerships; to organize our review of recent literature about the precursors and consequences of teen romance; and to identify existing gaps requiring further research.

DEVELOPMENTAL SALIENCE OF RELATIONSHIP QUALITY AND STABILITY

Adolescent romantic relationships are a central component of normative adolescent development because they provide a foundation for interim

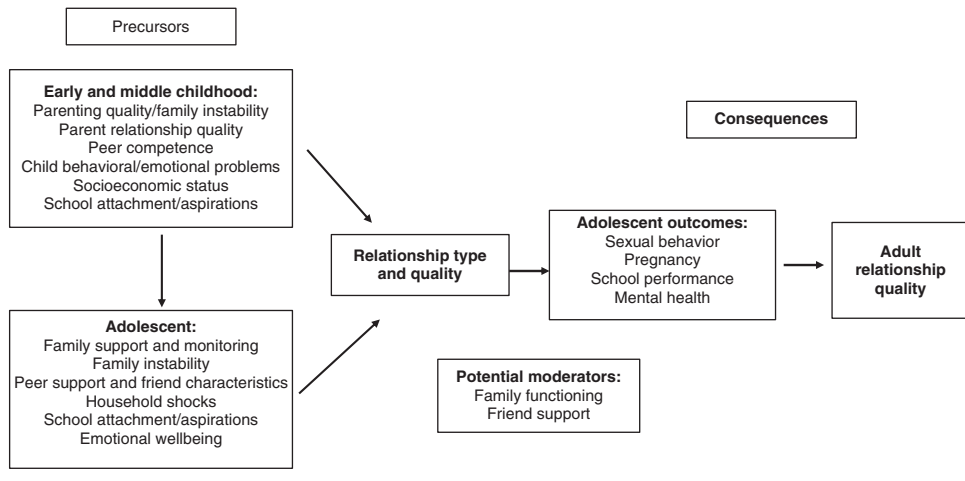


Figure 2 Conceptual model of precursors and consequences of adolescent romantic relationships.

and long-term emotional attachments (Meier & Allen, 2009; Raley *et al.*, 2007). Early studies of teen partnerships focused on adverse outcomes, such as sexual risk behavior and depression (Davila, 2008), which produced uneven knowledge of the factors that predispose some teens to romantic and sexual experiences that compromise their emotional and physical health, while others form partnerships conducive to positive development (Collins, 2003; Giordano, 2003). That initial scholarship on teen sexual activity was framed within a risk paradigm deflected attention from its developmentally normative aspects. As adolescent sexual behavior has become statistically normative, however, researchers seek to identify relationship qualities conducive to healthy attachments, sexual self-efficacy, and physical health (Harden, 2014).

The empirical base establishing positive links between teen romance and prosocial outcomes, such as sexual satisfaction, positive self-esteem, social competence, and identity development, is thinner than that for problem behaviors and depression (Collins, 2003; Collins *et al.*, 2009). Nonetheless, caring and supportive teen relationships may foster short-term emotional well-being, but also can undermine youth development over the long run if the romance distracts from academic activities, or if emotional intimacy results in pregnancy (Giordano, Phelps, Manning, & Longmore, 2008; Manning, Flanigan, Giordano, & Longmore, 2009).

There is growing consensus that the health and developmental benefits from adolescents' partnerships depend on the timing and nature of the relationship (including its quality and stability); on partner characteristics; and on the social context in which the relationship occurs (Collins *et al.*, 2009;

Crosnoe & Johnson, 2011; Furman & Shaffer, 2003; Harden, 2014). Whether and how much observed associations between adolescent relationship quality and developmental outcomes reflect static relationship characteristics or *changes* in relationship content and quality is largely unknown. This research gap persists because few youth surveys record the relational content and dynamics of teen romantic relationships with sufficient temporal precision to establish causal links (Collins *et al.*, 2009; Meier & Allen, 2009). The TARS is notable for measuring relational dynamics at several intervals separated by 1–5 years. TARS researchers established associations between relationship quality and several behavioral outcomes, including sexual behavior, contraceptive use, and intimate partner violence (IPV) (Giordano, Manning, & Longmore, 2010a; Giordano, Soto, Manning, & Longmore, 2010b; Manning *et al.*, 2009).

Nevertheless, even the TARS data lack the measurement precision needed to causally link within-couple changes in relationship quality to changes in physical and emotional well-being. For example, cross-sectional analyses reveal that both positive (e.g., love, enmeshment) and negative (e.g., conflict, power asymmetries) relationship attributes are associated with inconsistent condom use (Manning *et al.*, 2009). That measurement of contraceptive use is seldom temporally aligned with shifts in relationship quality precludes establishing causal links. Break-ups are a consistently strong predictor of depression (Furman & Shaffer, 2003), but the intensity of reaction to relationship dissolution varies appreciably for reasons not well understood. Most studies linking adolescent romance to depressive symptoms use cross-sectional or periodic longitudinal designs, which offer limited insight into the underlying causal mechanisms and order of causality (Davila, 2008)—namely, under what circumstances depression triggers relationship dissolution versus when splits foster depression.

PRECURSORS OF TEEN RELATIONSHIP DYNAMICS

Life course theory indicates that the developmental salience of events depends on the age at which they occur (Elder, 1998). During early childhood, when development is most rapid and family dominates children's social interactions, adverse experiences, such as family disruption or IPV between parents, may be more consequential than later exposure to these events (Nurius, Logan-Greene, & Green, 2012). Alternatively, if exposures to negative circumstances occur early in the life course and do not recur, children may have time to recover before adolescence (Heard, 2007). Prolonged or repeated exposures to adverse childhood experiences may also impact the timing and quality of adolescent partnerships (Masten *et al.*, 2005; Nurius *et al.*, 2012).

Despite general agreement that teens' childhood experiences influence their capacity to form quality romantic attachments, there is less agreement about the particular family and early life circumstances conducive to healthy versus problematic teen partnerships. Some studies suggest possible intergenerational continuities between parents' and adolescents' relationship quality as measured by stability, supportiveness, and conflict (Amato, 1996; Cavanagh *et al.*, 2008; Cui, Durtschi, Donnellan, Lorenz, & Conger, 2010). Most inferences are tentative, however, owing to extensive reliance on local samples with limited external validity and reliance on weak measures (usually retrospective reports) of parent relationship quality (Stith *et al.*, 2000).

Several studies established associations between parent-child connectedness (e.g., parental support, closeness, and warmth) and reduced likelihood of risky sexual behavior (Miller, Benson, & Galbraith, 2001). Roisman *et al.* (2008) find that high quality maternal parenting during childhood and adolescence lowers the likelihood of forming romantic relationships in early adolescence and raises the likelihood of forming *high quality* romantic attachment among those in relationships. Several studies also reveal links between family structure and family instability and teen romantic and sexual behavior (Cavanagh *et al.*, 2008; Fomby, Mollborn, & Sennott, 2010). Teen romance can potentially compensate for dysfunctional family dynamics; however, low quality partnerships also may concentrate disadvantages (Crosnoe & Johnson, 2011). Giordano (2003) and other experts identify the need to specify the carry-over processes linking teens' family relationships, peer networks, and school experiences with their romantic partnerships (Cavanagh, 2007; Furman & Shaffer, 2003).

As elaborated below, because most studies of adolescents rely on retrospective measures of childhood behavioral and emotional issues, family functioning, parental relationships, and early school experiences, causal links between childhood experiences and adolescent outcomes, including romantic and intimate experiences, have not been established. Identification of sensitive periods during childhood when family, peer, and school experiences are particularly consequential for teens' ability to form stable, healthy emotional attachments has also been limited by retrospective childhood reports.

NEW RESEARCH DIRECTIONS

Much has changed since participants in the most prominent U.S. longitudinal studies of youth were adolescents in the mid-1990s. Two of the most notable are changes in the demographic composition of the youth

population and the explosion of social media and mobile technology, which altered teens' communication behaviors (Lenhart, Anderson, & Smith, 2015; Madden, Lenhart, Duggan, Cortesi, & Gasser, 2013). Both developments have important implications for future research on adolescent romance, including opportunities to reconcile discrepant findings and survey methods that better capture relationship flux.

DEMOGRAPHIC VARIATIONS

A robust literature has documented disparities by sex, race, ethnicity, and nativity in adolescent sexual activity and fertility (Manlove, Steward-Streng, Peterson, Scott, & Wildsmith, 2013; Santelli, Lowry, Brener, & Robin, 2000). Far less research has documented variations across population groups in the *partnerships* that underlie these behaviors. Similarities and differences between romantic relationships of sexual minority adolescents and those of heterosexual adolescents also have been relatively neglected, as have comparisons of cross-national samples (Collins *et al.*, 2009).

Owing to differences in measurement, samples, and outcomes examined, findings to date about demographic variations are inconsistent. Some studies claim that non-Hispanic black youth have less intense emotionally intimate relationships than white youth (Giordano, Manning, & Longmore, 2005; O'Sullivan, Cheng, Harris, & Brooks-Gunn, 2007), but others find no racial differences in emotionality or that steady relationships are actually more common among black youth (Meier & Allen, 2009). Even less is known about nativity variations, although it appears that first generation adolescents delay entry to romantic partnerships relative to their native-born counterparts (King & Harris, 2007) and also that sexual onset timing depends on both immigrant generation and age at migration (Goldberg, Tienda, & Adserà, 2017).

Empirical evidence about gender differences in teen romance also is mixed. Several studies suggest that adolescent girls may be more oriented toward intimacy and commitment than boys (Carver *et al.*, 2003); however, others claim that relationship emotionality is similar for boys and girls, and that relationship asymmetries are either trivial or tend to favor girls (Giordano, Longmore, & Manning, 2006; O'Sullivan *et al.*, 2007). Other studies claim that young women more often perpetrate IPV than young men (Giordano *et al.*, 2010b), but owing to differences in samples and research methods, conclusions about gender variation in IPV are inconsistent (Cui *et al.*, 2010).

Further scrutiny of variations in romantic experiences by race/ethnicity, gender, nativity, and sexual orientation, and in the precursors and consequences of these relationships, is thus warranted. Particularly important are studies that examine variations not only in sexual behavior and

partnership formation, but also in adolescent relationship quality and stability.

TEEN ROMANCE IN THE DIGITAL AGE

Another important development since the major U.S. longitudinal studies of youth were launched is the explosion of social media and mobile technology, which some claim has dramatically altered the way teens develop and maintain relationships (Bergdall *et al.*, 2012; Madden *et al.*, 2013). Taking advantage of the proliferation of smartphones among teens, researchers have begun to document how mobile technologies and social media are changing the way teens initiate, maintain, and dissolve romantic relationships (Duran, Miller-Ott, & Kelly, 2015).

Recent surveys indicate that although online spaces are not frequently used by adolescents for meeting romantic partners, they play a major role in how teens flirt, court, and communicate with potential and current partners (Lenhart *et al.*, 2015). Teens often use social media to “like,” comment, or “friend” a crush; furthermore, texting, instant or online messaging, and posting on social network sites facilitates interactions that enable relationship formation and maintenance, particularly as youth polish their interpersonal skills (Lenhart *et al.*, 2015; Valkenburg & Peter, 2011). Valkenburg, Sumter, and Peter (2011) characterize youth’s online disclosure and communication behavior as rehearsals for offline self-disclosure, which is important for less confident youth.

The ubiquity of mobile technology among adolescents coupled with constant access to the Internet and social media poses new risks and opportunities for teenagers’ romantic and sexual relationships. On the one hand, online communication platforms afford young people myriad opportunities for advancing personal identity, self-esteem, and sexual self-exploration—all key aspects of psychosocial development that can also fortify romantic partnerships. On the other hand, online platforms also pose risks that can undermine emotional well-being, including cyber-bullying, cyber-stalking, and dangerous interactions with strangers (Valkenburg & Peter, 2011). Teens can also experience abusive or controlling behaviors from current or former romantic partners (Lenhart *et al.*, 2015). “Sexting” commands media attention when personal harm is disclosed, but its prevalence among teens is unknown (Ahern & Mechling, 2013).

Much more research is needed to better understand how the proliferation of digital technology has altered adolescents’ coupling behaviors. The sources of vulnerability suggested above, particularly among youth with poor social skills, thin friendship networks, and limited romantic experiences, warrant

further investigation. Understanding the risks and opportunities afforded by teens' online behavior also requires systematic information about parental supervision of teens' behavior online (Wang, Bianchi, & Raley, 2005).

STRENGTHENING CAUSAL INFERENCE

Two general lines of inquiry remain underdeveloped in research about the precursors and consequences of adolescent romantic relationships. First, claims that capacity for intimacy in adolescence and adulthood evolve from earlier experiences that accumulate across the life course have not been fully tested because the major studies of youth begin in adolescence and rely on retrospection for information on earlier life stages. If a major strength of these surveys is the capacity to link adolescent experiences with adult outcomes, a major drawback is their limited information about childhood experiences that are potentially consequential for adolescent relationship experiences. Research from birth cohort studies following youth into adolescence and beyond will be vital to identifying causal relationships between childhood experiences (such as early family functioning) and adolescent partnership dynamics.

Second, the coarse temporal measurement used in existing study designs precludes researchers from deciphering causal ordering among the myriad physical, emotional, and social changes experienced during adolescence (Furman & Wehner, 1997). Investigating the precursors and consequences of teen romantic relationships requires a reliable temporal ordering of life course events, which is challenging because the developmental changes that define adolescence are temporally proximal to outcomes of interest and often mutually reinforcing (Collins *et al.*, 2009). Moreover, because adolescent relationships are highly dynamic, often short-lived, and frequently ambiguous in nature, recall over long periods introduces considerable reporting error.

INTENSIVE LONGITUDINAL METHODS

Claims that teen relationships are highly dynamic require frequent longitudinal follow-up to capture relationship emergence and evolution. Intensive longitudinal methods, which involve frequent and repeated measurement over time, are superior to periodic retrospective data for establishing the timing and sequencing of life events during a life stage characterized by rapid change (Bolger & Laurenceau, 2013). Intensive longitudinal methods represent a broad family of research designs, including *diaries*, *ecological momentary assessment (EMA)*, and *experience sampling methodology (ESM)*. Data from these methods can be used to portray the contours of teen relationships while

minimizing retrospection biases, record the evolution of relationships in real time (Barber, Kusunoki, & Gatny, 2011; Fortenberry *et al.*, 2005), and also capture flux in other dimensions of adolescents' lives that may be precursors and/or consequences of teens' coupling behavior (Bolger, Davis, & Rafaeli, 2003; Collins *et al.*, 2009).

Advances in smartphones and other mobile devices, and their increasing ubiquity and affordability, enable implementation of intensive longitudinal methods. Mobile technologies are appealing for conducting research on youth relationships because, in addition to aligning with teens' natural media habits, they (i) facilitate collection of sensitive information with minimal investigator intrusion; (ii) provide time and cost savings in longitudinal data collection; (iii) maximize participants' flexibility in response location and time of day; (iv) permit timely and accurate data retrieval; and (v) afford possibilities for passive collection of data on location, networks, and communication patterns via smartphone functionality (Bolger *et al.*, 2003; Collins *et al.*, 2009). Existing mobile studies of youth tend to focus on psychological well-being, to target local populations, and to span relatively short periods (e.g., 1 week) (Shrier, Koren, Aneja, & de Moor, 2010), which are not well suited to study the emergence and evolution of adolescent romantic experiences.

For studying teen romantic relationships, intensive longitudinal studies represent a largely uncharted research frontier, albeit one that promises to fill major research lacunae about the short-term consequences of adolescent partnering behavior. Still to be settled are numerous questions about optimal survey frequency, study duration, appropriate uses of smartphone functionality, and subject recruitment.

CONCLUSION

While much has been learned about adolescent romance in the past several decades, research has been limited by narrow operational definitions, coarse temporal measurement, retrospective reporting of childhood experiences, and lack of attention to how technologies influence teen romantic experiences in the digital age. Research designs with prospective data collection in *both* childhood and adolescence are essential to establish causal links between the two life stages; to evaluate hypotheses about cascading disadvantages; and to tease out the relative importance of childhood and adolescent precursors of healthy and unhealthy partnering behavior. An ideal research design would piggyback intensive longitudinal studies with birth cohort studies, particularly during pivotal periods such as the transition from childhood to early adolescence ("tween" years); middle adolescence; and the transition from late adolescence to adulthood. Such designs will help resolve

inconsistent conclusions about the contours, causes, and consequences of teen romantic relationships.

REFERENCES

- Ahern, N. R., & Mechling, B. (2013). Sexting: Serious problems for youth. *Journal of Psychosocial Nursing and Mental Health Services*, 51(7), 22–30.
- Amato, P. R. (1996). Explaining the intergenerational transmission of divorce. *Journal of Marriage and Family*, 58(3), 628–640.
- Barber, J. S., Kusunoki, Y., & Gatny, H. H. (2011). Design and implementation of an online weekly journal to study unintended pregnancies. *Vienna Yearbook of Population Research*, 9(1), 327–334.
- Bergdall, A. R., Kraft, J. M., Andes, K., Carter, M., Hatfield-Timajchy, K., & Hock-Long, L. (2012). Love and hooking up in the new millennium: Communication technology and relationships among urban African American and Puerto Rican young adults. *Journal of Sex Research*, 49(6), 570–582.
- Bolger, N., Davis, A., & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology*, 54(1), 579–616.
- Bolger, N., & Laurenceau, J.-P. (2013). *Intensive longitudinal methods: An introduction to diary and experience sampling research*. New York, NY: The Guilford Press.
- Carver, K., Joyner, K., & Udry, J. R. (2003). National estimates of adolescent romantic relationships. In P. Florsheim (Ed.), *Adolescent romantic relations and sexual behavior: Theory, research, and practical implications* (pp. 23–56). Mahwah, NJ: Lawrence Erlbaum Associates, Inc..
- Cavanagh, S. E. (2007). The social construction of romantic relationships in adolescence: Examining the role of peer networks, gender, and race*. *Sociological Inquiry*, 77(4), 572–600.
- Cavanagh, S. E., Crissey, S. R., & Raley, R. K. (2008). Family structure history and adolescent romance. *Journal of Marriage and Family*, 70(3), 698–714.
- Collins, W. A. (2003). More than myth: The developmental significance of romantic relationships during adolescence. *Journal of Research on Adolescence*, 13(1), 1–24.
- Collins, W. A., Welsh, D. P., & Furman, W. (2009). Adolescent romantic relationships. *Annual Review of Psychology*, 60(1), 631–652.
- Crosnoe, R., & Johnson, M. K. (2011). Research on adolescence in the twenty-first century. *Annual Review of Sociology*, 37(1), 439–460.
- Cui, M., Durtschi, J. A., Donnellan, M. B., Lorenz, F. O., & Conger, R. D. (2010). Intergenerational transmission of relationship aggression: A prospective longitudinal study. *Journal of Family Psychology: JFP: Journal of the Division of Family Psychology of the American Psychological Association (Division 43)*, 24(6), 688–697.
- Davila, J. (2008). Depressive symptoms and adolescent romance: Theory, research, and implications. *Child Development Perspectives*, 2(1), 26–31.
- Duran, R. L., Miller-Ott, A. E., & Kelly, L. (2015). The role of mobile phones in romantic relationships. In Y. Zheng (Ed.), *Encyclopedia of mobile phone behavior* (pp. 322–337). Hershey, PA: IGI Global.

- Elder, G. H. (1998). The life course as developmental theory. *Child Development, 69*(1), 1–12.
- Fomby, P., Mollborn, S., & Sennott, C. A. (2010). Race/ethnic differences in effects of family instability on adolescents' risk behavior. *Journal of Marriage and Family, 72*(2), 234–253.
- Fortenberry, J. D., Temkit, M., Tu, W., Graham, C. A., Katz, B. P., & Orr, D. P. (2005). Daily mood, partner support, sexual interest, and sexual activity among adolescent women. *Health Psychology, 24*(3), 252–257.
- Furman, W., McDunn, C., & Young, B. J. (2008). The role of peer and romantic relationships in adolescent affective development. In N. B. Allen & L. B. Sheeber (Eds.), *Adolescent emotional development and the emergence of depressive disorders* (pp. 299–317). Cambridge, UK: Cambridge University Press.
- Furman, W., & Shaffer, L. (2003). The role of romantic relationships in adolescent development. In P. Florsheim (Ed.), *Adolescent romantic relations and sexual behavior: Theory, research, and practical implications* (pp. 3–22). Mahwah, NJ: Psychology Press.
- Furman, W., & Wehner, E. A. (1997). Adolescent romantic relationships: A developmental perspective. *New Directions for Child and Adolescent Development, 197*(78), 21–36.
- Giordano, P. C. (2003). Relationships in adolescence. *Annual Review of Sociology, 29*(1), 257–281.
- Giordano, P. C., Longmore, M. A., & Manning, W. D. (2006). Gender and the meanings of adolescent romantic relationships: A focus on boys. *American Sociological Review, 71*(2), 260–287.
- Giordano, P. C., Manning, W. D., & Longmore, M. A. (2005). The romantic relationships of African-American and white adolescents. *The Sociological Quarterly, 46*(3), 545–568.
- Giordano, P. C., Manning, W. D., & Longmore, M. A. (2010a). Affairs of the heart: Qualities of adolescent romantic relationships and sexual behavior. *Journal of Research on Adolescence: The Official Journal of the Society for Research on Adolescence, 20*(4), 983–1013.
- Giordano, P. C., Phelps, K. D., Manning, W. D., & Longmore, M. A. (2008). Adolescent academic achievement and romantic relationships. *Social Science Research, 37*(1), 37–54.
- Giordano, P. C., Soto, D. A., Manning, W. D., & Longmore, M. A. (2010b). The characteristics of romantic relationships associated with teen dating violence. *Social Science Research, 39*(6), 863–874.
- Goldberg, R. E., Tienda, M., & Adserà, A. (2017). Age at migration, family instability, and timing of sexual onset. *Social Science Research, 63*(March), 292–307.
- Halpern-Meekin, S., Manning, W. D., Giordano, P. C., & Longmore, M. A. (2013). Relationship churning, physical violence, and verbal abuse in young adult relationships. *Journal of Marriage and Family, 75*(1), 2–12.
- Harden, K. P. (2014). A sex-positive framework for research on adolescent sexuality. *Perspectives on Psychological Science, 9*(5), 455–469.

- Heard, H. E. (2007). Fathers, mothers, and family structure: Family trajectories, parent gender, and adolescent schooling. *Journal of Marriage and Family*, 69(2), 435–450.
- King, R. B., & Harris, K. M. (2007). Romantic relationships among immigrant adolescents. *International Migration Review*, 41(2), 344–370.
- Lenhart, A., Anderson, M., & Smith, A. (2015). *Teens, technology and romantic relationships*. <http://www.pewinternet.org/2015/10/01/teens-technology-and-romantic-relationships/>
- Madden, M., Lenhart, A., Duggan, M., Cortesi, S., & Gasser, U. (2013). *Teens and technology 2013*. Washington, DC: Pew Research Center. <http://www.pewinternet.org/2013/03/13/teens-and-technology-2013/>.
- Manlove, J., Steward-Streng, N., Peterson, K., Scott, M., & Wildsmith, E. (2013). Racial and ethnic differences in the transition to a teenage birth in the United States. *Perspectives on Sexual and Reproductive Health*, 45(2), 89–100.
- Manning, W. D., Flanigan, C. M., Giordano, P. C., & Longmore, M. A. (2009). Relationship dynamics and consistency of condom use among adolescents. *Perspectives on Sexual and Reproductive Health*, 41(3), 181–190.
- Manning, W. D., Longmore, M. A., & Giordano, P. C. (2005). Adolescents' involvement in non-romantic sexual activity. *Social Science Research*, 34(2), 384–407.
- Masten, A. S., Roisman, G. I., Long, J. D., Burt, K. B., Obradović, J., Riley, J. R., ... Tellegen, A. (2005). Developmental cascades: Linking academic achievement and externalizing and internalizing symptoms over 20 years. *Developmental Psychology*, 41(5), 733–746.
- Meier, A., & Allen, G. (2009). Romantic relationships from adolescence to young adulthood: Evidence from the National Longitudinal Study of Adolescent Health. *Sociological Quarterly*, 50(2), 308–335.
- Miller, B. C., Bensen, B., & Galbraith, K. A. (2001). Family relationships and adolescent pregnancy risk: A research synthesis. *Developmental Review*, 21, 1–38.
- Nurius, P. S., Logan-Greene, P., & Green, S. (2012). Adverse childhood experiences (ACE) within a social disadvantage framework: Distinguishing unique, cumulative, and moderated contributions to adult mental health. *Journal of Prevention & Intervention in the Community*, 40(4), 278–290.
- O'Sullivan, L. F., Cheng, M. M., Harris, K. M., & Brooks-Gunn, J. (2007). I wanna hold your hand: The progression of social, romantic and sexual events in adolescent relationships. *Perspectives on Sexual and Reproductive Health*, 39(2), 100–107.
- Raley, R. K., Crissey, S., & Muller, C. (2007). Of sex and romance: Late adolescent relationships and young adult union formation. *Journal of Marriage and Family*, 69(5), 1210–1226.
- Rauer, A. J., Pettit, G. S., Lansford, J. E., Bates, J. E., & Dodge, K. A. (2013). Romantic relationship patterns in young adulthood and their developmental antecedents. *Developmental Psychology*, 49(11), 2159–2171.
- Roisman, G. I., Booth-LaForce, C., Cauffman, E., & Spieker, S. (2008). The developmental significance of adolescent romantic relationships: Parent and peer predictors of engagement and quality at age 15. *Journal of Youth and Adolescence*, 38(10), 1294.

- Santelli, J. S., Lowry, R., Brener, N. D., & Robin, L. (2000). The association of sexual behaviors with socioeconomic status, family structure, and race/ethnicity among US adolescents. *American Journal of Public Health, 90*(10), 1582–1588.
- Shrier, L. A., Koren, S., Aneja, P., & de Moor, C. (2010). Affect regulation, social context, and sexual intercourse in adolescents. *Archives of Sexual Behavior, 39*(3), 695–705.
- Stith, S. M., Rosen, K. H., Middleton, K. A., Busch, A. L., Lundeberg, K., & Carlton, R. P. (2000). The intergenerational transmission of spouse abuse: A meta-analysis. *Journal of Marriage and Family, 62*(3), 640–654.
- Valkenburg, P. M., & Peter, J. (2011). Online communication among adolescents: An integrated model of its attraction, opportunities, and risks. *Journal of Adolescent Health, 48*(2), 121–127.
- Valkenburg, P. M., Sumter, S. R., & Peter, J. (2011). Gender differences in online and offline self-disclosure in pre-adolescence and adolescence. *British Journal of Developmental Psychology, 29*(2), 253–269.
- Wang, R., Bianchi, S. M., & Raley, S. B. (2005). Teenagers' internet use and family rules: A research note. *Journal of Marriage and Family, 67*(5), 1249–1258.

RACHEL E. GOLDBERG SHORT BIOGRAPHY

Rachel E. Goldberg is assistant professor of sociology at the University of California, Irvine. She received her PhD in sociology (2012) from Brown University, an MPH (2003) from Columbia University, and was a postdoctoral research associate at Princeton University from 2012 to 2015. She has research and policy experience focused on adolescent sexual and reproductive health, including romantic relationships, and family dynamics, across various countries including the United States, Kenya, South Africa, and the Dominican Republic. Goldberg serves as co-PI of the *mDiary Study of Adolescent Relationships*.

MARTA TIENDA SHORT BIOGRAPHY

Marta Tienda is Maurice P. Daring '22 professor in demographic studies, professor of sociology and public affairs, and research associate in the Office of Population Research at Princeton University. She is a Fellow of the American Academy of Arts and Sciences; the American Academy of Political and Social Sciences; and the National Academy of Education and past president of the Population Association of America. Her research interests include immigrant integration, equity and access to quality education, and successful adolescent development. Tienda serves as co-PI of the *mDiary Study of Adolescent Relationships*.

RELATED ESSAYS

Neighborhoods and Cognitive Development (*Psychology*), Jondou Chen and Jeanne Brooks-Gunn

Peers and Adolescent Risk Taking (*Psychology*), Jason Chein

Parenting with Digital Devices (*Psychology*), Pamela E. Davis-Kean and Sandra Tang

The Others as Social Context: On the Importance of Strategic Interaction (*Sociology*), Andreas Diekmann

Resilience (*Psychology*), Erica D. Diminich and George A. Bonanno

Sexual Behavior (*Anthropology*), Melissa Emery Thompson

Social Class and Parental Investment in Children (*Sociology*), Anne H. Gauthier

Changing Family Patterns (*Sociology*), Kathleen Gerson and Stacy Torres

Immigrant Children and the Transition to Adulthood (*Sociology*), Roberto G. Gonzales and Benjamin J. Roth

Divorce (*Sociology*), Juho Härkönen

Family Formation in Times of Labor Market Insecurities (*Sociology*), Johannes Huinink

Emotion and Decision Making (*Psychology*), Jeff R. Huntsinger and Cara Ray

The Development of Social Trust (*Psychology*), Vikram K. Jaswal and Marissa B. Drell

The Neurobiology and Physiology of Emotions: A Developmental Perspective (*Psychology*), Sarah S. Kahle and Paul D. Hastings

Childhood (*Anthropology*), Karen L. Kramer

The Psychological Impacts of Cyberlife Engagement (*Psychology*), Virginia S. Y. Kwan and Jessica E. Bodford

Understanding Risk-Taking Behavior: Insights from Evolutionary Psychology (*Psychology*), Karin Machluf and David F. Bjorklund

The Future of Marriage (*Sociology*), Elizabeth Aura McClintock

Social Change and Entry to Adulthood (*Sociology*), Jeylan T. Mortimer

The Role of School-Related Peers and Social Networks in Human Development (*Political Science*), Chandra Muller

Positive Developments During the Transition to Adulthood (*Psychology*), Gil G. Noam and Bailey Triggs

Schooling, Learning, and the Life Course (*Education*), Aaron M. Pallas

Gender and the Transition to Adulthood: A Diverse Pathways View (*Sociology*), Ingrid Schoon

Impact of Limited Education on Employment Prospects in Advanced Economies (*Sociology*), Heike Solga

Temporal Identity Integration as a Core Developmental Process (*Psychology*), Moin Syed and Lauren L. Mitchell

Family Complexity and Kinship (*Sociology*), Elizabeth Thomson
Immigrant Adolescents: Opportunities and Challenges (*Psychology*), Peter F. Titzmann and Linda Juang
Did That Brownie Do Its Job? Stress, Eating, and the Biobehavioral Effects of Comfort Food (*Psychology*), A. Janet Tomiyama *et al.*
Social Neuroendocrine Approaches to Relationships (*Sociology*), Sari M. van Anders and Peter B. Gray